# Robin J Leatherbarrow

List of Publications by Year
in descending order



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|---|---|---|---|
| 113 papers | 5,308 citations | 53794 45 h-index | 91884 69 g-index |
| 116 all docs | 116 docs citations | 116 times ranked | 4451 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Novel Thienopyrimidine Inhibitors of Leishmania N-Myristoyltransferase with On-Target Activity in Intracellular Amastigotes. Journal of Medicinal Chemistry, 2020, 63, 7740-7765. | 6.4 | 15 |
| 2 | Fragment-derived inhibitors of human N-myristoyltransferase block capsid assembly and replication of the common cold virus. Nature Chemistry, 2018, 10, 599-606. | 13.6 | 96 |
| 3 | A tri-functional vanadium(<scp>iv</scp>) complex to detect cysteine oxidation. Dalton Transactions, 2017, 46, 6994-7004. | 3.3 | 6 |
| 4 | Structure-guided optimization of quinoline inhibitors of Plasmodium N-myristoyltransferase. MedChemComm, 2017, 8, 191-197. | 3.4 | 14 |
| 5 | Vanadyl complexes with dansyl-labelled di-picolinic acid ligands: synthesis, phosphatase inhibition activity and cellular uptake studies. Dalton Transactions, 2016, 45, 7104-7113. | 3.3 | 4 |
| 6 | Synchronized Optical and Electronic Detection of Biomolecules Using a Low Noise Nanopore Platform. ACS Nano, 2015, 9, 1740-1748. | 14.6 | 62 |
| 7 | Discovery of pyridyl-based inhibitors of Plasmodium falciparum N-myristoyltransferase. MedChemComm, 2015, 6, 1767-1772. | 3.4 | 13 |
| 8 | Discovery of high affinity inhibitors of Leishmania donovani N-myristoyltransferase. MedChemComm, 2015, 6, 1761-1766. | 3.4 | 30 |
| 9 | Using a Non-Image-Based Medium-Throughput Assay for Screening Compounds Targeting N-myristoylation in Intracellular Leishmania Amastigotes. PLoS Neglected Tropical Diseases, 2014, 8, e3363. | 3.0 | 16 |
| 10 | Design and synthesis of irreversible inhibitors of foot-and-mouth disease virus 3C protease. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 490-494. | 2.2 | 7 |
| 11 | Design and Synthesis of High Affinity Inhibitors of Plasmodium falciparum and Plasmodium vivax N-Myristoyltransferases Directed by Ligand Efficiency Dependent Lipophilicity (LELP). Journal of Medicinal Chemistry, 2014, 57, 2773-2788. | 6.4 | 63 |
| 12 | Validation of N-myristoyltransferase as an antimalarial drug target using an integrated chemical biology approach. Nature Chemistry, 2014, 6, 112-121. | 13.6 | 196 |
| 13 | Diverse modes of binding in structures ofLeishmania majorN-myristoyltransferase with selective inhibitors. IUCrJ, 2014, 1, 250-260. | 2.2 | 38 |
| 14 | Structure-Based Design of Potent and Selective Leishmania N-Myristoyltransferase Inhibitors. Journal of Medicinal Chemistry, 2014, 57, 8664-8670. | 6.4 | 56 |
| 15 | Peptidomimetic inhibitors ofN-myristoyltransferase from human malaria and leishmaniasis parasites. Organic and Biomolecular Chemistry, 2014, 12, 8132-8137. | 2.8 | 30 |
| 16 | Potent and specific inhibition of the biological activity of the type-II transmembrane serine protease matriptase by the cyclic microprotein MCoTI-II. Thrombosis and Haemostasis, 2014, 112, 402-411. | 3.4 | 27 |
| 17 | Enantioselective synthesis of (+)-aspercyclide A. Tetrahedron Letters, 2013, 54, 4970-4972. | 1.4 | 10 |
| 18 | Development of small molecules to target the IgE:FcÎµRI proteinâ€“protein interaction in allergies. Future Medicinal Chemistry, 2013, 5, 1423-1435. | 2.3 | 12 |

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|---|---|---|---|
| 19 | Discovery of Novel and Ligand-Efficient Inhibitors of Plasmodium falciparum and Plasmodium vivaxN-Myristoyltransferase. Journal of Medicinal Chemistry, 2013, 56, 371-375. | 6.4 | 58 |
| 20 | Selective Inhibitors of Protozoan Protein N-myristoyltransferases as Starting Points for Tropical Disease Medicinal Chemistry Programs. PLoS Neglected Tropical Diseases, 2012, 6, e1625. | 3.0 | 79 |
| 21 | Droplet dispensing in digital microfluidic devices: Assessment of long-term reproducibility. Biomicrofluidics, 2012, 6, 22003-2200310. | 2.4 | 19 |
| 22 | Discovery of Plasmodium vivaxN-Myristoyltransferase Inhibitors: Screening, Synthesis, and Structural Characterization of their Binding Mode. Journal of Medicinal Chemistry, 2012, 55, 3578-3582. | 6.4 | 65 |
| 23 | Design and Synthesis of Inhibitors of Plasmodium falciparumN-Myristoyltransferase, A Promising Target for Antimalarial Drug Discovery. Journal of Medicinal Chemistry, 2012, 55, 8879-8890. | 6.4 | 56 |
| 24 | Synthesis and Incorporation into Cyclic Peptides of Tolan Amino Acids and Their Hydrogenated Congeners: Construction of an Array of Aâ€“B-loop Mimetics of the CÎµ3 Domain of Human IgE. Journal of Organic Chemistry, 2012, 77, 3197-3214. | 3.2 | 21 |
| 25 | Mutational Locally Enhanced Sampling (MULES) for quantitative prediction of the effects of mutations at proteinâ€“protein interfaces. Chemical Science, 2012, 3, 1503. | 7.4 | 2 |
| 26 | A fluorescence-based assay for N-myristoyltransferase activity. Analytical Biochemistry, 2012, 421, 342-344. | 2.4 | 69 |
| 27 | Synthesis of the C19 methyl ether of aspercyclide A via germyl-Stille macrocyclisation and ELISA evaluation of both enantiomers following optical resolution. Organic and Biomolecular Chemistry, 2011, 9, 6814. | 2.8 | 10 |
| 28 | Comparing experimental and computational alanine scanning techniques for probing a prototypical proteinâ€“protein interaction. Protein Engineering, Design and Selection, 2011, 24, 197-207. | 2.1 | 73 |
| 29 | A Two-step Mechanism for the Folding of Actin by the Yeast Cytosolic Chaperonin. Journal of Biological Chemistry, 2011, 286, 178-184. | 3.4 | 26 |
| 30 | Organic Solvent Nanofiltration: A New Paradigm in Peptide Synthesis. Organic Process Research and Development, 2010, 14, 1313-1325. | 2.7 | 45 |
| 31 | Insights into Cleavage Specificity from the Crystal Structure of Foot-and-Mouth Disease Virus 3C Protease Complexed with a Peptide Substrate. Journal of Molecular Biology, 2010, 395, 375-389. | 4.2 | 63 |
| 32 | N-Myristoyltransferase from Leishmania donovani: Structural and Functional Characterisation of a Potential Drug Target for Visceral Leishmaniasis. Journal of Molecular Biology, 2010, 396, 985-999. | 4.2 | 98 |
| 33 | Membrane enhanced peptide synthesis. Chemical Communications, 2010, 46, 2808. | 4.1 | 42 |
| 34 | Total synthesis of (Â±)-aspercyclide A and its C19 methyl ether. Chemical Communications, 2010, 46, 1824-1826. | 4.1 | 31 |
| 35 | Analysis of Proteinâ€“Protein Interactions by Using Dropletâ€Based Microfluidics. ChemBioChem, 2009, 10, 1605-1611. | 2.6 | 60 |
| 36 | Potent Inhibitors of Î²-Tryptase and Human Leukocyte Elastase Based on the MCoTI-II Scaffold. Journal of Medicinal Chemistry, 2009, 52, 6197-6200. | 6.4 | 126 |

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| 37 | Nâ€Myristoyltransferase: a Prospective Drug Target for Protozoan Parasites. ChemMedChem, 2008, 3, 402-408. | 3.2 | 60 |
| 38 | N-Myristoyl transferase-mediated protein labelling in vivo. Organic and Biomolecular Chemistry, 2008, 6, 2308. | 2.8 | 128 |
| 39 | Specific N-terminal protein labelling: use of FMDV 3Cpro protease and native chemical ligation. Chemical Communications, 2008, , 3369. | 4.1 | 27 |
| 40 | Site-specific N-terminal labelling of proteinsin vitro and in vivo using N-myristoyl transferase and bioorthogonal ligation chemistry. Chemical Communications, 2008, , 480-482. | 4.1 | 78 |
| 41 | Chemical and biomimetic total syntheses of natural and engineered MCoTI cyclotides. Organic and Biomolecular Chemistry, 2008, 6, 1462. | 2.8 | 148 |
| 42 | Molecules incorporating a benzothiazole core scaffold inhibit the N-myristoyltransferase of Plasmodium falciparum. Biochemical Journal, 2007, 408, 173-180. | 3.7 | 61 |
| 43 | Structural and Mutagenic Analysis of Foot-and-Mouth Disease Virus 3C Protease Reveals the Role of the Î²-Ribbon in Proteolysis. Journal of Virology, 2007, 81, 115-124. | 3.4 | 81 |
| 44 | Foot-and-mouth disease virus 3C protease: Recent structural and functional insights into an antiviral target. International Journal of Biochemistry and Cell Biology, 2007, 39, 1-6. | 2.8 | 58 |
| 45 | Immobilized Protease-Assisted Synthesis of Engineered Cysteine-Knot Microproteins. ChemBioChem, 2007, 8, 1107-1109. | 2.6 | 46 |
| 46 | Resisting degradation by human elastase: Commonality of design features shared by â€˜canonicalâ€™ plant and bacterial macrocyclic protease inhibitor scaffolds. Bioorganic and Medicinal Chemistry, 2007, 15, 4618-4628. | 3.0 | 5 |
| 47 | A continuous assay for foot-and-mouth disease virus 3C protease activity. Analytical Biochemistry, 2007, 368, 130-137. | 2.4 | 16 |
| 48 | Total synthesis of the macrocyclic cysteine knot microprotein MCoTI-II. Chemical Communications, 2006, , 2848. | 4.1 | 55 |
| 49 | Peptide-based inhibitors ofN-myristoyl transferase generated from a lipid/combinatorial peptide chimera library. Signal Transduction, 2006, 6, 160-166. | 0.4 | 5 |
| 50 | Characterization and selective inhibition of myristoyl-CoA:protein N-myristoyltransferase from Trypanosoma brucei and Leishmania major. Biochemical Journal, 2006, 396, 277-285. | 3.7 | 57 |
| 51 | Reagent-Controlled Stereoselective Synthesis of Lignan-Related Tetrahydrofurans.. ChemInform, 2005, 36, no. | 0.0 | 0 |
| 52 | A Novel, Stereoselective and Convergent Synthesis of Aryltetralins.. ChemInform, 2005, 36, no. | 0.0 | 0 |
| 53 | Analysis of calibration methodologies for solvent effects in drug discovery studies using evanescent wave biosensors. Biosensors and Bioelectronics, 2005, 21, 128-134. | 10.1 | 6 |
| 54 | Solution Structure of a Novel C2-Symmetrical Bifunctional Bicyclic Inhibitor Based on SFTI-1. Journal of Biomolecular NMR, 2005, 33, 57-62. | 2.8 | 12 |

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|---|---|---|---|
| 55 | Crystal Structure of Foot-and-Mouth Disease Virus 3C Protease. Journal of Biological Chemistry, 2005, 280, 11520-11527. | 3.4 | 126 |
| 56 | Design, synthesis and analysis of novel bicyclic and bifunctional protease inhibitors. Protein Engineering, Design and Selection, 2004, 17, 681-687. | 2.1 | 33 |
| 57 | Inhibition of human Î²-tryptase by Bowmanâ€“Birk inhibitor derived peptides: creation of a new tri-functional inhibitor. Bioorganic and Medicinal Chemistry, 2004, 12, 6045-6052. | 3.0 | 20 |
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| 59 | Reagent-Controlled Stereoselective Synthesis of Lignan-Related Tetrahydrofurans. Journal of Organic Chemistry, 2004, 69, 6874-6882. | 3.2 | 76 |
| 60 | A novel, stereoselective and convergent synthesis of aryltetralins. Chemical Communications, 2004, , 2292. | 4.1 | 11 |
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| 62 | The Structural Basis of a Conserved P2 Threonine in Canonical Serine Proteinase Inhibitors. Journal of Biomolecular Structure and Dynamics, 2003, 20, 645-655. | 3.5 | 10 |
| 63 | The1H-NMR Solution Structure of the Antitryptic Core Peptide of Bowman-Birk Inhibitor Proteins: A Minimal â€˜Canonical Loopâ€™. Journal of Biomolecular Structure and Dynamics, 2002, 20, 59-70. | 3.5 | 25 |
| 64 | A Conserved cis Peptide Bond Is Necessary for the Activity of Bowman-Birk Inhibitor Protein. Biochemistry, 2002, 41, 10608-10615. | 2.5 | 54 |
| 65 | Peptide mimics of the Bowman-Birk inhibitor reactive site loop. Biopolymers, 2002, 66, 79-92. | 2.4 | 86 |
| 66 | Inhibition of human Î²â€tryptase by Bowmanâ€“Birk inhibitor derived peptides. Chemical Biology and Drug Design, 2002, 59, 90-93. | 1.1 | 7 |
| 67 | The Bowman-Birk inhibitor reactive site loop sequence represents an independent structural Î²-hairpin motif. Journal of Molecular Biology, 2001, 306, 799-807. | 4.2 | 45 |
| 68 | Introduction of the new dipeptide isostere 7-endo-BtA as reverse turn inducer in a Bowman-Birk proteinase inhibitor. Bioorganic and Medicinal Chemistry, 2001, 9, 1625-1632. | 3.0 | 18 |
| 69 | Synthetic Peptide Mimics of the Bowman-Birk Inhibitor Protein. Current Medicinal Chemistry, 2001, 8, 909-917. | 2.4 | 50 |
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| 71 | Screening and Synthesis of a Positional Scanning Library Based on the Bowman-Birk Reactive Site Loop. , 2001, , 196-197. | | 0 |
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| 73 | Identification of chymotrypsin inhibitors from a second-generation template assisted combinatorial peptide library. Journal of Peptide Science, 2000, 6, 446. | 1.4 | 0 |
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| 75 | Selection of human elastase inhibitors from a conformationally constrained combinatorial peptide library. FEBS Journal, 1999, 266, 403-412. | 0.2 | 42 |
| 76 | The role of the P2â€² position of Bowman-Birk proteinase inhibitor in the inhibition of trypsin. BBA - Proteins and Proteomics, 1999, 1431, 232-237. | 2.1 | 38 |
| 77 | A study of the specificity of barley chymotrypsin inhibitor 2 by cysteine engineering of the P1 residue. BBA - Proteins and Proteomics, 1998, 1384, 325-334. | 2.1 | 3 |
| 78 | Second-Order Kinetic Analysis of IAsys Biosensor Data: Its Use and Applicability. Analytical Biochemistry, 1998, 263, 1-12. | 2.4 | 45 |
| 79 | Effect of Osmolytes on the Exchange Rates of Backbone Amide Protons in Proteins. Biochemistry, 1998, 37, 2969-2978. | 2.5 | 66 |
| 80 | The role of threonine in the P 2 position of bowman-birk proteinase inhibitors: studies on P 2 variation in cyclic peptides encompassing the reactive site loop 1 1Edited by A. R. Fersht. Journal of Molecular Biology, 1998, 282, 447-457. | 4.2 | 44 |
| 81 | Determination of Association Rate Constants by an Optical Biosensor Using Initial Rate Analysis. Analytical Biochemistry, 1997, 246, 1-6. | 2.4 | 74 |
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| 85 | Kinetics of Protein-Protein Interactions at the Surface of an Optical Biosensor. Analytical Biochemistry, 1995, 231, 210-217. | 2.4 | 187 |
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| 87 | Expression and kinetic characterization of barley chymotrypsin inhibitors 1a and 1b. Biochimica Et Biophysica Acta - Molecular Cell Research, 1994, 1222, 179-186. | 4.1 | 8 |
| 88 | Carbon-13 NMR study of the effects of mutation on the tryptophan dynamics in chymotrypsin inhibitor 2: correlations with structure and stability. Biochemistry, 1993, 32, 657-662. | 2.5 | 22 |
| 89 | Carbon-13 NMR study of the effects of mutation on the tryptophan dynamics in chymotrypsin inhibitor 2: correlations with structure and stability. [Erratum to document cited in CA118(5):34967r]. Biochemistry, 1993, 32, 4474-4474. | 2.5 | 0 |
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| 91 | Carbon-13 nuclear magnetic resonance relaxation study of chymotrypsin inhibitor 2 (CI-2). Magnetic Resonance in Chemistry, 1992, 30, 1255-1260. | 1.9 | 3 |
| 92 | Diversification of the IgG molecule by oligosaccharides. Molecular Immunology, 1991, 28, 1369-1378. | 2.2 | 67 |
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| 95 | Use of nonlinear regression to analyze enzyme kinetic data: Application to situations of substrate contamination and background subtraction. Analytical Biochemistry, 1990, 184, 274-278. | 2.4 | 31 |
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| 98 | Bovine dopamine .beta.-hydroxylase, primary structure determined by cDNA cloning and amino acid sequencing. Biochemistry, 1990, 29, 6466-6474. | 2.5 | 22 |
| 99 | Using linear and non-linear regression to fit biochemical data. Trends in Biochemical Sciences, 1990, 15, 455-458. | 7.5 | 192 |
| 100 | Designer catalytic antibodies. Nature, 1989, 338, 206-207. | 27.8 | 3 |
| 101 | Investigation of transition-state stabilization by residues histidine-45 and threonine-40 in the tyrosyl-tRNA synthetase. Biochemistry, 1987, 26, 8524-8528. | 2.5 | 42 |
| 102 | Structure-activity relationships in engineered proteins: analysis of use of binding energy by linear free energy relationships. Biochemistry, 1987, 26, 6030-6038. | 2.5 | 155 |
| 103 | Protein engineering. Protein Engineering, Design and Selection, 1986, 1, 7-16. | 2.1 | 99 |
| 104 | Binding energy and catalysis: a lesson from protein engineering of the tyrosyl-tRNA synthetase. Trends in Biochemical Sciences, 1986, 11, 321-325. | 7.5 | 84 |
| 105 | Structure and activity of the tyrosy1-tRNA synthetase: the hydrogen bond in catalysis and specificity. Philosophical Transactions of the Royal Society A, 1986, 317, 305-320. | 1.1 | 20 |
| 106 | Quantitative analysis of structureâ€“activity relationships in engineered proteins by linear free-energy relationships. Nature, 1986, 322, 284-286. | 27.8 | 111 |
| 107 | Transition-state stabilization in the mechanism of tyrosyl-tRNA synthetase revealed by protein engineering.. Proceedings of the National Academy of Sciences of the United States of America, 1985, 82, 7840-7844. | 7.1 | 180 |
| 108 | Effector functions of a monoclonal aglycosylated mouse IgG2a: Binding and activation of complement component C1 and interaction with human monocyte Fc receptor. Molecular Immunology, 1985, 22, 407-415. | 2.2 | 199 |

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| 109 | Binding of complement subcomponent Clq to mouse IgGl, IgG2a AND IgG2b: A novel Clq binding assay. Molecular Immunology, 1984, 21, 321-327. | 2.2 | 47 |
| 110 | The effect of aglycosylation on the binding of mouse IgG to staphylococcal protein A. FEBS Letters, 1983, 164, 227-230. | 2.8 | 37 |
| 111 | Role of tyrosines in the combining site of the dinitrophenyl-binding IgA myeloma M315: specific nitration and high-resolution proton nuclear magnetic resonance studies. Biochemistry, 1982, 21, 5124-5129. | 2.5 | 12 |
| 112 | A combined proton and phosphorus-31 nuclear magnetic resonance investigation of the combining site of M603, a phosphocholine-binding myeloma protein. Biochemistry, 1982, 21, 4927-4931. | 2.5 | 10 |
| 113 | Antibody specificity: a 270-MHz hydrogen-1 nuclear magnetic resonance study of the binding of dinitrophenyl compounds to the VL dimer of protein 315. Biochemistry, 1981, 20, 2339-2345. | 2.5 | 6 |